**SPECIFICATION AMENDMENTS**

Please replace the section entitled ABSTRACT on page 34 with the following amended paragraph:

ABSTRACT

~~The invention provides a~~ A multifocal optical lens having a holographic optical element that selectively redirects light to provide the wearer with a single image formed from a single focal power. The invention also provides a method for producing a multifocal optical lens having a holographic optical element.

**Please add the following section and paragraph immediately before the first paragraph on page 1:**

The present application is related to and claims, under 35 U.S.C. § 120, the benefit of International Application No. PCT/EP 01/15352, filed 28 December 2001, which claims priority to U.S. Provisional Application No. 60/258,923, filed 29 December 2000, which are expressly incorporated fully herein by reference.

**Please replace the paragraph on page 13, starting on line 20, with the following paragraph:**

FIG. 6 also illustrates the situation where a wearer of the bifocal lens **34** is viewing a distant object. Light from a distant object **20** strikes the first reflection HOE **36** at an angle that does not activate the first reflection HOE ~~38~~ 36. In other words, the light from the distant object **20** forms an incident angle that is outside the activation angle of the first reflection HOE **36**. The light from the distant object **20** passes through the first reflection HOE **36** and is focused in accordance with the first focusing element **16**, in combination with the optical power of the crystalline lens of the eye (which is not shown), to a focal point **24** on the retina of the eye, more specifically on the fovea. However, the second reflection HOE **38** is programmed with a volume grating structure having an activation angle that reflects light having the incident angle exhibited by the light from the distant object **20**. Therefore, the second reflection HOE **38** reflects the incoming light, preventing it from entering the eye.

**Please replace the paragraph on page 14, starting on line 1, with the following paragraph:**

FIG. 6 (a) illustrates the situation where a wearer is viewing a near object. Light from the near object **22** strikes the second reflection HOE **38** at an angle that does not activate the second reflection HOE **38**. In other words, the light from the near object **22** forms an incident angle that is outside the activation angle of the second reflection HOE **38**. The light from the near object **22** passes through the second reflection HOE **38** and is focused in accordance with the second focusing element **18**, in combination with the optical power of the crystalline lens of the eye (which is not shown), to a focal point **24** on the retina of the eye, more specifically on the fovea. However, the first reflection HOE **36** is programmed with a volume grating structure having an activation angle that reflects light having the incident angle exhibited by the light from the near object **22**. Therefore, the first reflection HOE ~~30~~ 36 reflects the incoming light, preventing it from entering the eye.

**Please replace the paragraph on page 18, starting on line 1, with the following paragraph:**

Another group of HOEs suitable for the present invention can be produced from conventional volume holographic optical element recording media. As with the above-described polymerizable materials for HOEs, object light and collimated reference light are simultaneously projected onto an HOE recording medium such that the electromagnetic waves of the object and reference light ~~from~~ form interference fringe patterns. The interference fringe patterns, *i.e.*, volume grating structure, are recorded in the HOE medium. When the HOE recording medium is fully exposed, the recorded HOE medium is developed in accordance with a known HOE developing method. Suitable volume holographic optical element recording media include commercially available holographic photography recording materials or plates, such as dichromatic gelatins. Holographic photography recording materials are available from various manufacturers, including Polaroid Corp. When photographic recording materials are used as the HOE, however, toxicological effects of the materials on the ocular environment must be considered. Accordingly, when a conventional photographic HOE material is used, it is preferred that the HOE is encapsulated in a biocompatible optical material. FIG. 7. Useful biocompatible optical materials for encapsulating the HOE include optical materials that are suitable for the first focusing element of the present lens.

**Please replace the paragraph on page 23, starting on line 19, with the following paragraph**

As mentioned previously, the invention may be utilized in the embodiment of an intraocular lens. In this embodiment the HOE of the lens is formed according to the methods described above. The primary difference between this embodiment and the previously discussed embodiments is that this lens is designed to be inserted into the eye. Such lenses, methods of manufacturing such lenses, and methods of inserting such lenses are generally known to those skilled in the art. These lenses and methods of manufacture are described in several publications such as U.S. Patent 5,776,192 to McDonald; U.S. Patent 5,044,743 to Ting; U.S. Patent ~~4,595,070~~ 4,959,070 to McDonald; and U.S. Patent 4,769,035 to Kelman, all of which are incorporated herein by reference.